

ABSTRACT

A method for treating an electroless plating liquid or other metal-containing solution that also contains reducing agents. The method includes providing a reaction vessel
5 containing an anode, a cathode, and a hydrogen ion-permeable membrane separating the anode and the cathode, placing the metal-containing liquid in contact with the anode, placing a catholyte solution in contact with the cathode; driving an electrical current through the anode and the cathode to oxidize the reducing agents present, and removing the used catholyte solution and the partially treated liquid from the electrodes, optionally from the
10 reaction vessel to separate reservoirs. The partially treated liquid and an anolyte solution are placed in contact with the cathode and anode, respectively, and a current is again driven through the anode and cathode, plating a majority of the metal ions onto the cathode. The steps of oxidizing the reducing agents and plating the metal ions may also be reversed in order.